



# **RAILTOWN 1897**

## **State Historic Park**

Jamestown, California

### **FRA PART 217 Operations Compliance Testing & Verification**

## **Program Manual**

April 2010

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Operations testing plays a vital role in operating rule compliance, policy compliance, and safety training programs. To be effective it requires the cooperation and personal effort of all supervisors concerned.**

The objective of Operations testing is:

- a) To reduce human-failure incidents;
- b) To improve crew member compliance with specific Rules & Safety Policies;
- c) To determine the degree of knowledge, understanding, compliance, or non-compliance, with the Operating Rules, Safety Rules, Air Brake & Train Handling Rules, & Safety Rules.

**The overall objective of conducting tests on rules, policies, & related special instructions is to achieve & maintain the highest degree of safety in the railroad's operations.**

Operations tests, properly conducted, benefit safe operations by:

- a) Reducing the likelihood of human-factor failures related to a lack of knowledge or understanding of the applicable rules &/or lack of respect for rules compliance;
- b) Educating crew members, in particular those who pass & those who fail a particular test;
- c) Providing management insight as to which rules or subjects require increased emphasis during training, re-certification or necessary re-training.

All Supervisors must observe compliance with the rules, special instructions & General Orders during routine supervisory duties. Supervisors must not be indifferent to violations. Supervisors must clearly & firmly indicate to crew members that full compliance is a condition of employment. Supervisors are expected to take time to bring to the attention of the crew member all successes, any violations observed, & the corrective measures the crew member must take to avoid future violations.

An Operations Test is a deliberate, objective procedure or observation, performed without the crew member's advance or direct knowledge, intended to provide an objective determination of the level of rules knowledge & compliance. ***Testing is not conducted with the intention or desire to entrap a crew member or trick them into making an error;*** instead it is intended to measure proficiency & isolate areas of non-compliance for immediate corrective action.

The Park Superintendent is responsible to verify that Supervisors conduct appropriate & the proper level of Operations Testing.

Operations Management will establish minimum operations testing objectives for each operating season. These objectives may be revised in response to trends in test failures, compliance failures or actual incidents. Under the provisions of 49 CFR Part 217, Supervisors are responsible for fulfilling their Operations Testing obligations under this Plan in order to verify Railtown remains in compliance with FRA mandates regarding such testing.

**It is Railtown's policy that an crew member who performs covered service be subjected to unannounced operations tests in reasonable proportion to the number of days he or she performs such service during the operating season, but not fewer than two separate tests on different rules as provide for in this manual.**

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**General Principles for Conducting Operations Testing**

1. Each example shown is a guide to conducting a test on a particular requirement of a rule or special instruction. Supervisors have some discretion in structuring each test; however, the guidelines should be followed closely in an effort to verify system uniformity.
2. Supervisors must not conduct any tests that would result in an actual hazardous condition should the tested crew member or individual fail to comply.
3. Supervisors must not instruct crew members to violate rules, nor violate rules themselves – even for testing purposes.
4. Records of operations tests & rule violations must be recorded on the provided form and filed as part of the covered service employees' records.
5. Following an operations test where a no cardinal rule violation occurs, each crew member involved must be briefed on the results as soon as practical. Briefing must discuss both successes & failures of the test. Timely feedback is of the utmost importance; therefore the advice must be given as soon as possible after the test. Advice may also be followed up with notification given in writing.

**In the event of a cardinal or de-certifiable rule violation, the movement must be stopped immediately & the appropriate action taken by Supervisors.**

6. There are two types of operations tests: Setup Tests & Observation Tests.
  - A. **Observation Test:** Any test recorded by a Supervisor while observing crew member rules compliance during the normal course of the crew member &/or Supervisors duties.
  - B. **Setup Test:** Any test recorded by a Supervisor where the conditions are physically changed by that Supervisor to test rules compliance.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 1 – Speed Limit Compliance

**Procedures:**

Speed to be determined by use of a radar device or timed transit between known points.

**Purpose of Test:**

To determine compliance with the following requirements:

1. Maximum authorized speed as indicated in the Timetable/Special Instructions.
2. Temporary speed restrictions.
3. MOW speed restrictions or EIC authorized speed.
4. Speed through turnouts or other established restrictions.

**Applicable Conditions For Testing:**

1. Temporary speed restrictions
2. Handling cars ahead of locomotive
3. Equipment restrictions
4. Timetable/Special instructions

**Crew member Requirements:**

Speed must not be in excess of the speed restrictions in effect at a specific location.

**Test Number & Name:** 4 – Main Track Authorization

**Procedures:**

Direct observation/verification that a train crew possesses proper authority to occupy a main track, or if a main track is already occupied, obtaining additional authority necessary for continued movement.

**Purpose of Test:**

To determine the movement has proper authority to occupy main track.

**Applicable Conditions For Testing:**

Main Track Authorization

**Crew member Requirements:**

Crew member must obtain proper authority before initiating movement on a main track.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 10 – Leaving Locomotive Unattended

**Procedures:**

Observe crew when preparing to leave locomotive(s) unattended.

**Purpose of Test:**

To verify locomotive is secured to prevent undesired movement.

**Applicable Conditions For Testing:**

Air Brake & Train Handling Rules & other instructions pertaining to unattended locomotive(s).

**Crew member Requirements:**

- Locomotive controls are properly positioned & secured.
- Handbrakes, where equipped are properly applied.
- Cab doors, where applicable, are locked when equipped with locks.
- Wheels are properly blocked, skated or chained when required.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 11 – Proper Radio Procedures

**Procedures:**

Monitor radio communications between crew members

**Purpose of Test:**

Determine that crew members who communicate via radio do so in compliance with GCOR Chapter 2.0 & correctly issue or repeat information using the required format.

**Applicable Conditions For Testing:**

Operating rules references to radio use & formats to be used.

**Crew member Requirements:**

Crew members must use the proper format when transmitting via wireless communications.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 12 – Locomotive Air Brake Test

**Procedures:**

Verify by direct observation that crew performs proper locomotive standing air brake test as & when required by the Air Brake & Train Handling Rules.

**Purpose of Test:**

Determine that crew members taking charge of a locomotive(s) perform a locomotive air brake test per rule requirement.

**Applicable Conditions For Testing:**

When Air Brake & Train Handling rules require a Standing Locomotive Air Brake Test.

**Crew member Requirements:**

Crew members must comply with Air Brake & Train Handling rule requirements for taking charge of a locomotive(s) & are required to perform this test.

**Test Number & Name:** 13 – Initial Terminal Air Brake Test/Class I Brake Test

**Procedures:**

Be in a position to observe crew members performing this test & to verify that proper procedures were followed.

**Purpose of Test:**

To verify crew members are performing an Initial Terminal Air Brake Test/Class I Brake Test as required by rule.

**Applicable Conditions For Testing:** Observe these conditions wherever an Initial Terminal Air Brake Test/Class I Brake Test is required by rule.

**Crew member Requirements:** Crew members must comply with the requirements of AB&TH rules.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 13.1 – Application & Release/Class 3 Air Brake Test

**Procedures:**

Be in a position to observe crew members performing this test & to verify that proper procedures were followed.

**Purpose of Test:**

To verify crew members are performing an Application & Release/Class 3 Air Brake Test as required by rule.

**Applicable Conditions For Testing:**

Observe these conditions whenever an Application & Release/Class 3 Air Brake Test is required by rule.

**Crew member Requirements:**

Crew members must comply with the requirements of AB&TH rules.



**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 15 – Locomotive Daily Inspection

**Procedures:**

1. Be in a position to observe crew members performing this test.
2. Verify written documentation.

**Purpose of Test:**

To verify crew members are performing a Locomotive Daily Inspection as required by rule.

**Applicable Conditions For Testing:**

Observe that crew members are performing a Locomotive Daily Inspection when conditions require.

**Crew member Requirements:**

Crew members must :

1. Perform this inspection when required by rule.
2. Make appropriate notations on the locomotive cab card.
3. Fill out the required locomotive inspection form(s).

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 16 – Controlling/Protecting Shoving Movements

**Procedures:**

Observe crew members making/protecting shoving movement. Verify compliance with “distance to go” & radio procedures as well as crew members’ situational awareness of track conditions.

**Purpose of Test:**

Verify crew members properly protecting shoving/pushing movements as required by rule or condition.

**Applicable Conditions For Testing:**

Rules pertaining to:

1. Using radio instead of hand signals.
2. Disappearance of the light or crew member controlling the movement.
3. Compliance with being able to stop within one-half the range of vision.

**Crew member Requirements:**

1. Crew members must comply with “distance to go” requirements when using radios to protect shoving movements.
2. Engineers must stop the move within one-half the distance last specified unless additional instructions are received.
3. When required, crew members protecting the shove must be at, on, ahead of the movement or have positive knowledge that the track to be used is clear of all possible obstructions.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 18 – Handling of Switches/Derails

**Procedures:**

Direct observation of crew members approaching with equipment & then handling switches &/or derails.

**Purpose of Test:**

1. To verify that crew members handling switches &/or derails are operating them according to the rules.
2. To verify that equipment approaching & stopping at switches &/or derails to be operated stop the distance required by rules from the switch &/or derail.

**Applicable Conditions For Testing:**

Observation of all crew members who handle switches &/or derails at any location.

**Crew member Requirements:**

1. Crew members are required to operate switches &/or derails according to the rules.
2. Crew members are required to stop a specified distance from derails in the derailing position.
3. Equipment must not foul an adjacent track before the route to be used is properly lined.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 19 – Grade Crossing Whistle Signal Compliance.

**Procedures:**

Be in a position to observe that the required whistle signal is sounded & headlights are properly displayed before a highway grade crossing is occupied by any rail equipment.

**Purpose of Test:**

1. To verify that all required headlights, whistle & bell signals are utilized as required by rule until the crossing is occupied when a locomotive is in the lead.
2. To verify that proper warning is provided at a highway grade crossing if a locomotive is not in the lead of the movement.

**Applicable Conditions For Testing:**

1. Whistle signal must start at least 15 seconds but not more than 20 seconds from the crossing continue until the crossing is occupied.
2. When shoving movement is made, crew member provides warning at the crossing as required by rule.

**Crew member Requirements:**

Compliance is required for protecting all public grade crossings when the movement is headed by locomotive, on-track equipment or shoving equipment over a highway crossing.

**Test Number & Name:** 21 – Securing Equipment

**Procedures:**

1. Be in a position to observe crew members leaving equipment unattended or unoccupied.
2. Inspect equipment immediately after crew members have left the area.

**Purpose of Test:**

To verify rules pertaining to proper securement of equipment are complied with when equipment is left unattended.

**Applicable Conditions For Testing:**

1. Inspecting equipment left unattended.
2. Observation of crews preparing to leave equipment unattended.

**Crew member Requirements:**

Crew members are required to properly secure all equipment left unattended.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 22 – Fitness for Duty

**Procedures:**

Be in a position to closely observe crew members reporting for duty.

**Purpose of Test:**

To verify reporting crew members are fit for duty, have the required PPE, equipment, tools & rule books necessary for their job.

**Applicable Conditions For Testing:**

Verify crew members are prepared for work at the designated time & place.

**Crew member Requirements:**

Crew members are required to report for duty at the designated time & place & be properly prepared for immediate work at that time.

**Test Number & Name:** 24 – Job Briefings

**Procedures:**

Be in a position to closely observe crew members reporting for duty. Be in a position to observe changes in job procedures.

**Purpose of Test:**

1. To verify crew members hold job briefing before a task is begun & anytime during the duty tour that job procedures change.
2. To verify that all members affected are included in the job briefings.
3. To verify that job briefing plans are followed exactly by all members of the group.

**Applicable Conditions For Testing:**

Observe job briefings are conducted, when job briefings are supposed to be conducted. Listen to communications within the work group to verify plans include all members & are followed exactly.

**Crew member Requirements:**

Crew members are required to hold job briefings before any task is begun & whenever plans change. Crew members are responsible to follow the briefing plans & ask questions if anything is unclear.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 25 – Red Zone Compliance

**Procedures:**

Observe crew members working in a Red Zone. Monitor communications & observe engineer's response & control manipulations when three-step protection is requested.

**Purpose of Test:**

Verify crew members comply with Red Zone Requirements before entering the Red Zone, including engineer's proper control manipulation to provide three step protection when requested. Verify Red Zone protection is properly released prior to initiating movement.

**Applicable Conditions For Testing:**

1. Observe ground crew members when they are going in between, under or on equipment that is attached to an occupied locomotive.
2. Observe engineers to verify they correctly respond to a request to enter the Red Zone.
3. Observe crew members to verify Red Zone is properly released.

**Crew member Requirements:**

1. Crew members are required to request Red Zone protection before going in between, under or on equipment that is attached to an occupied locomotive.
2. Engineers are required to properly respond to a request to enter the Red Zone.
3. Crew members are required to release Red Zone prior to initiating movement.

**Test Number & Name:** 26 – Separation Of Equipment

**Procedures:**

Be in a position to clearly observe crew members walking around or between uncoupled equipment.

**Purpose of Test:**

To verify crew members separate uncoupled equipment the minimum safe distance between before going in between for any purpose.

**Applicable Conditions For Testing:**

Observe ground crew members when they are going in between uncoupled equipment.

**Crew member Requirements:**

Crew members are required to verify that there is no less than 50 feet of clear space between uncoupled equipment before entering this area.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 29 – Getting On/Off Equipment

**Procedures:**

Observe crew members working around moving & standing equipment.

**Purpose of Test:**

To verify crew members mount & dismount standing or moving equipment as prescribed by the safety rules.

**Applicable Conditions For Testing:**

Observe crew members when they are mounting or dismounting standing or moving equipment.

**Crew member Requirements:**

1. Crew members are required to mount & dismount standing equipment using the sill steps; ladders & handhold provided using three-point contact.
2. Crew members are prohibited from mounting or dismounting moving when the equipment is moving in excess of 4 MPH or when a dry secure footing is not present.

**Test Number & Name:** 30 – Applying/Releasing Handbrakes

**Procedures:**

Observe crew members applying or releasing handbrakes.

**Purpose of Test:**

To verify crew members apply & release handbrakes in compliance with operating & safety rules.

**Applicable Conditions For Testing:**

Observe crew members when they are applying or releasing handbrakes to verify compliance.

**Crew member Requirements:**

Crew members required to properly position themselves on car to apply or release handbrakes except cars having handbrakes designed to be operated from a position on the ground.

**Test Number & Name:** 31 – Operating Rules - General

**Procedures:**

Be in a position to clearly observe crew members in their work environment.

**Purpose of Test:**

To verify crew members comply with operating rules not otherwise categorized in this program.

**Applicable Conditions For Testing:**

Observe crew members when they are working in their environment.

**Crew member Requirements:**

Crew members are required to comply with all operating rules.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 32 – Safety Rules - General

**Procedures:**

Be in a position to clearly observe crew members in their work environment.

**Purpose of Test:**

To verify crew members comply with safety rules & procedures rules not otherwise categorized in this program.

**Applicable Conditions For Testing:**

Observe crew members when they are working in their environment.

**Crew member Requirements:**

Crew members are required to comply with all safety rules & procedures.

**Test Number & Name:** 33 – Air Brake & Train Handling Rules - General

**Procedures:**

Be in a position to clearly observe crew members in their work environment.

**Purpose of Test:**

To verify crew members comply with air brake & train handling rules not otherwise categorized in this program.

**Applicable Conditions For Testing:**

Observe crew members when they are working in their environment.

**Crew member Requirements:**

Crew members are required to comply with all air brake & train handling rules.

**Test Number & Name:** 34 – Supervisor Check Ride

**Procedures:**

Ride with a train crew during a portion of their normal tour of duty.

**Purpose of Test:**

1. Generally verify crew members comply with all rules, instructions, general orders, etc.
2. To listen to crew members suggestions & concerns.
3. To familiarize the supervisor with the physical characteristics of the railroad & to become familiar with the crew members he/she supervises.

**Applicable Conditions For Testing:**

Observe crew members when they are working in their environment.

**Crew member Requirements:**

Crew members are required to comply with all railroad rules & regulations.



**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 45 – Main Track Switch Verification

**Procedures:**

Observe crew members releasing Main Track Authority to verify proper confirmation with the Train Dispatcher of MTS position. Monitor radio communications when Main Track Switches are operated or released to the Train Dispatcher.

**Purpose of Test:**

To verify compliance with requirement for verification of Main Track Switch position.

**Applicable Conditions For Testing:**

1. Observation of crew member operating MTS.
2. Observation of crew member releasing Main Track Authority.
3. Observation of Train Dispatcher releasing Main Track Authority

**Crew member Requirements:**

Crew members are required to comply with all rules concerning verification of position of main track switches

**Test Number & Name:** 46 – Main Track Switch Operation

**Procedures:**

Observe Main Track switch operation by train crews.

**Purpose of Test:**

To verify crew members comply with all required components of MTS operation.

**Applicable Conditions For Testing:**

Observe crew members when they are operating Main Track switches.

**Crew member Requirements:**

Crew members are required to comply with all rules regarding the operation of Main Track Switches.

**Railtown 1897 State Historic Park**  
**Part 217-Operations Compliance Testing Program Manual**

**Test Number & Name:** 69 – Coupling/Uncoupling equipment

**Procedures:**

Be in a position to observe crew members while coupling/uncoupling equipment.

**Purpose of Test:**

To verify that crew members coupling/uncoupling equipment are complying with rule requirements.

**Applicable Conditions For Testing:**

Observe crew members while coupling/uncoupling equipment.

**Crew member Requirements:**

1. Crew members are prohibited from going between or in front of moving equipment to operate coupling mechanisms.
2. Crew members are prohibited from placing part of their body on or between a coupler & the end sill of equipment.
3. Crew members coupling air hoses must verify that all movement has stopped, provide Red Zone or blue signal/flag protection & keep one foot outside the rail.
4. Crew members must verify equipment to couple into is secure & coupling speed must not exceed 4MPH.

# Railtown 1897 State Historic Park

## Testing Form

☐ Part 217-Ops Compliance

☐ Part 219-Drug and Alcohol Compliance

☐ Part 240-Engineer Quals

Crew member (E1) Name \_\_\_\_\_

Date \_\_\_\_\_

Crew member (E2) Name \_\_\_\_\_

Testing Official(s):

Crew member (E3) Name \_\_\_\_\_

\_\_\_\_\_

Crew member (E4) Name \_\_\_\_\_

\_\_\_\_\_

Test Location \_\_\_\_\_

\_\_\_\_\_

Engine Number \_\_\_\_\_

Train or Job ID \_\_\_\_\_

| Test | Test Description                             | Pass/Fail |    |    |    | Comments |
|------|--|-----------|----|----|----|----------|
|      |  | E1        | E2 | E3 | E4 |          |
| 219  | Reasonable Suspicion- Direct Observation     |           |    |    |    | Time:    |
| 240  | Test:  |           |    |    |    |          |
| 1    | Speed Limit Compliance                       |           |    |    |    |          |
| 4    | Main Track Authority                         |           |    |    |    |          |
| 10   | Unattended Locomotive                        |           |    |    |    |          |
| 11   | Radio Procedures                             |           |    |    |    |          |
| 12   | Locomotive Air Brake Test                    |           |    |    |    |          |
| 13   | Initial Terminal/Class 1 Air Brake Test      |           |    |    |    |          |
| 13.1 | Application & Release/Class 3 Air Brake Test |           |    |    |    |          |
| 15   | Locomotive Daily Inspection                  |           |    |    |    |          |
| 16   | Controlling/Protecting Shoving Moves         |           |    |    |    |          |
| 18   | Handling of Switches/Derails                 |           |    |    |    |          |
| 19   | Grade Crossing Warning                       |           |    |    |    |          |
| 21   | Securing Equipment                           |           |    |    |    |          |
| 22   | Fitness For Duty                             |           |    |    |    |          |
| 22.1 | Drug & Alcohol                               |           |    |    |    |          |
| 24   | Job Briefing                                 |           |    |    |    |          |
| 25   | Red Zone                                     |           |    |    |    |          |
| 26   | Separation Of Equipment                      |           |    |    |    |          |
| 29   | Getting On/Off Equipment                     |           |    |    |    |          |
| 30   | Applying/Releasing Handbrakes                |           |    |    |    |          |
| 31   | Other Operating Rules                        |           |    |    |    |          |
| 32   | Other Safety Rules                           |           |    |    |    |          |
| 33   | Other ABTH Rules                             |           |    |    |    |          |
| 34   | Supervisor Check Ride                        |           |    |    |    |          |
| 45   | Main Track Switch Verification               |           |    |    |    |          |
| 46   | Main Track Switch Operation                  |           |    |    |    |          |
| 69   | Coupling/Uncoupling Equipment                |           |    |    |    |          |

## COMMENTS:

Railtown part 217 testing manual revised april 2010.doc